

UK Patent Application GB 2 081 678 A

(21) Application No 8028107

(22) Date of filing 11 Aug 1980

(43) Application published

24 Feb 1982

(51) INT CL⁵

B85D 81/04

(52) Domestic classification

BBP E2D

(66) Documents cited

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(58) Field of search

BBP

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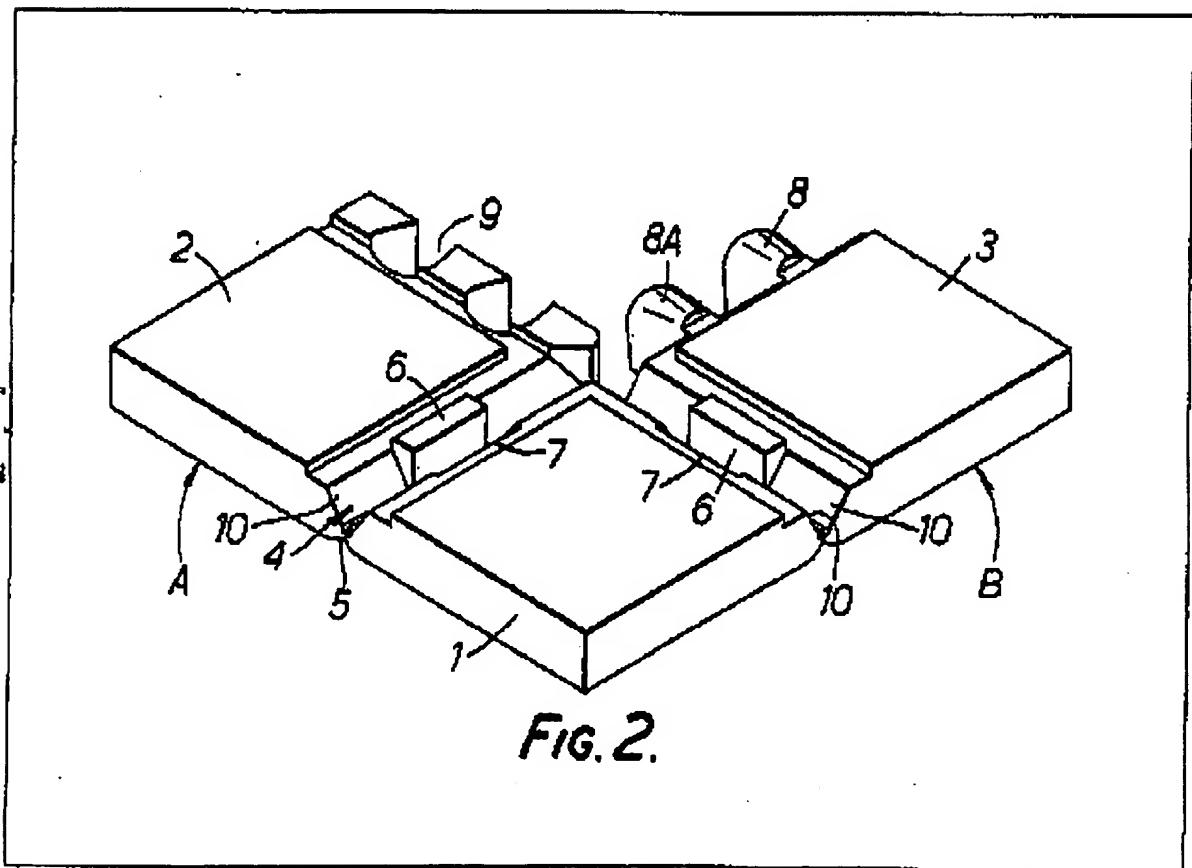
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(64) Folding protective corner
pieces

(57) A foamed plastics blank can be stored substantially flat and then folded to form a protective article, for example a corner pieces for use during storage and transit of refrigerators and furniture, the blank comprising at least two portions (1, 2, 3) hinged together (5) at adjacent edges, with means (8, 9) which interengage, when the blank is folded, to retain it in the folded condition.

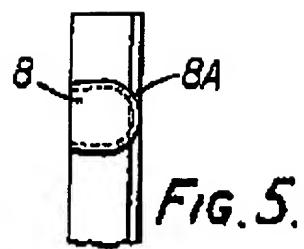
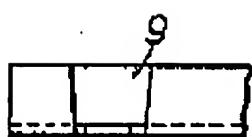
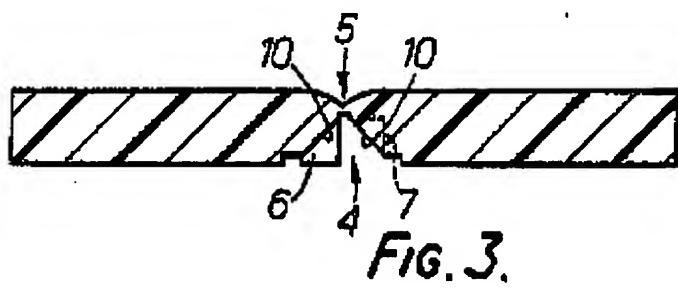
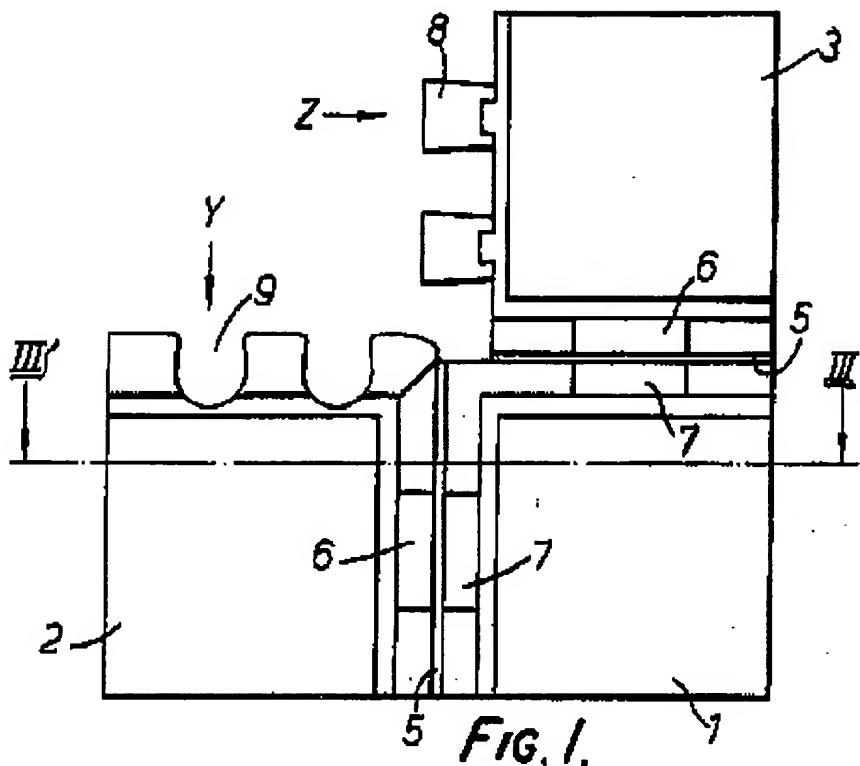


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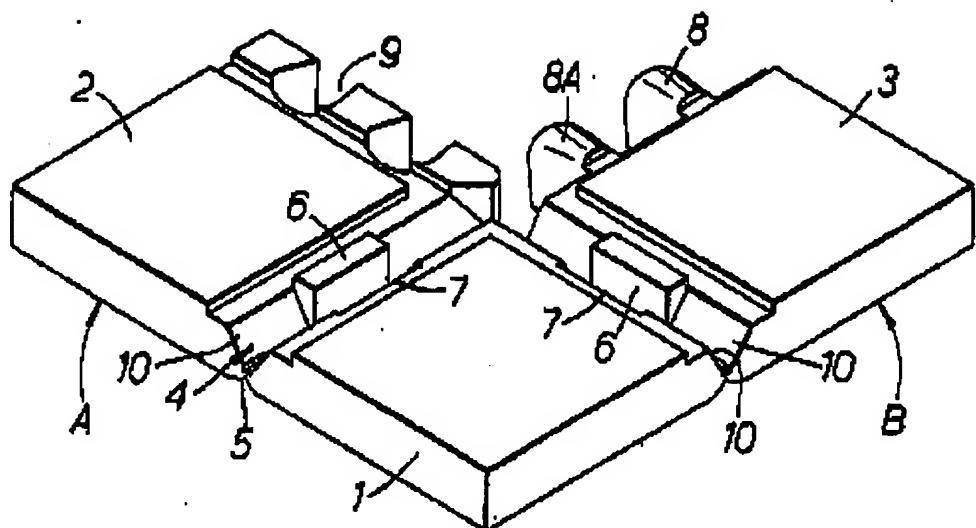


FIG. 2.

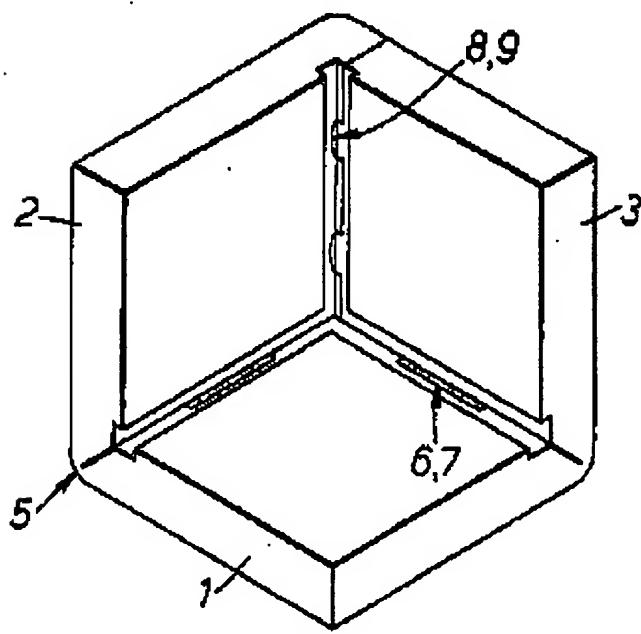


FIG. 6.

SPECIFICATION.**Folding protective corner pieces**

This Invention relates to protective articles of foamed plastics material and blanks for such articles.

Such articles are known which are used to protect products, such as refrigerators, washing machines, cookers and furniture, and particularly the corners or protrusions of such products. For example, protective corner pieces have been used in the form of a unitary moulding comprising three sides tapering to a point. The problem with such known corner pieces is that they require substantial volume for transportation and storage.

The present Invention provides a blank for a protective article of foamed plastics material which can be stored substantially flat and which can be assembled into a desired shape when required.

A protective article in the form of a corner piece and a blank therefor in accordance with the invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a plan view of the blank for the corner piece,

Figure 2 is an isometric projection of the blank,

Figure 3 is a cross-sectional view taken along the line III—III of Figure 1,

Figure 4 is a detail view of a slot taken in the direction of arrow Y in Figure 1,

Figure 5 is a detail view of a projection taken in the direction of arrow Z in Figure 1, and

Figure 6 is an isometric projection of the protective corner piece assembled and ready for use.

Referring to Figures 1 to 5, the blank is formed from expanded polystyrene, or other suitable plastics material, and comprises three adjacent portions 1—3 having generally flat major surfaces. The portions 1 and 2 are each joined to the portion 1 along adjacent edges by a narrow connecting strip 5 which acts as a flexible hinge. The strip is formed during the manufacturing process by compressing the blank in the area 4 immediately after the foaming process and while the blank is still warm. It is preferred to manufacture the blank using a transfer dry moulding process, but conventional moulding processes could be used.

Adjacent the hinge 5, each portion 1—3 has a side edge 10 which is angled and slopes towards the hinge, as best seen in Figures 2 and 3. Of adjacent side edges 10, one has a projection 6 and the other has a complementary recess 7 into which the projection 6 can fit.

Along another edge of portion 2 are formed projections 8 having a curved portion 8A, the projections being adapted to fit in complementary recesses 9 formed on an edge of portion 3.

To assemble the protective corner piece of Figure 3 from the blank of Figure 2, the portion 2 is lifted in the direction of arrow A so that the projection 6 of portion 2 engages in the

complementary slot 7 of portion 1, and portion 3 is lifted in the direction of arrow B to engage the projection 6 of that portion with its complementary slot 7, the projections 8 being fitted into the slot 8.

Modifications of the above described blank and corner-piece are possible. For example the number and shapes of the portions 1 to 3 could be altered to provide a protective article to fit a product of particular shape. Furthermore, a blank could be provided with more than one above-described blank joined by an intermediate portion. For example, to fit over the top and four corners of a product such as a refrigerator or washing machine, a blank could have a major, central portion arranged to lay over the top of the product with each corner arranged as described above. In other words, the portions 1 of four of the above described blanks could be part of and integral with the central portion.

The blanks for the protective article are transported flat, reducing transport and storage costs, and need be assembled with little manual time and effort only when required.

CLAIMS

1. A blank for a protective article of plastics material, which blank can be stored substantially flat and then folded into a desired shape when required, which comprises at least two portions having generally flat major surfaces hinged together, two of said portions including means which interengage when said blank is folded to retain it in said desired shape.

2. A blank according to claim 1, wherein the edges of adjacent portions at the hinges are chamfered so that, upon folding the blank to the desired shape, the chamfered edges are juxtaposed face-to-face.

3. A blank according to claim 2, wherein the edges of adjacent portions at the hinges have protrusions and complementary recesses, the protrusions being received in the recesses upon folding the blank.

4. A blank according to claim 2 or 3, wherein the edges of adjacent portions at the hinges have protrusions and complementary recesses, the protrusions being received in the recesses upon folding the blank.

5. A blank according to any preceding claim, which comprises three said portions and which can be folded to provide a protective corner piece.

6. A blank according to claim 5, which comprises four or more portions of which at least three can be folded to form a corner piece.

7. A blank according to any preceding claim, wherein said interengaging means comprise one or more projections formed on one said portion, and one or more complementary recesses formed on another said portion.

8. A blank according to any preceding claim which is moulded from foamed polystyrene.

9. A blank according to claim 2, or claim 2 and any of claims 3 to 8, wherein the relatively thin areas of plastics material have been formed by

compressing corresponding areas of the plastics
blank immediately after foaming while the blank is
still warm.

10. A blank for a protective article of plastics

5 material substantially as herein described with
reference to the accompanying drawings.
11. A protective article formed from a blank as
claimed in any preceding claim.

Printed for Her Majesty's Stationery Office by the Coulter Press, Letchworth Spa, 1952. Published by the Patent Office,
25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained.

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